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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,720

08/20/2003

Steven R. Mead

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EXAMINER

LAUX, JESSICA L

ART UNIT

PAPER NUMBER

3635

MAIL DATE

DELIVERY MODE

10/05/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/645,720	Applicant(s) MEAD, STEVEN R.	
	Examiner JESSICA LAUX	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-16, 19-32, 34-40 and 42-45 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-16, 19-32, 34-40, 42-45 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Acknowledgment is made of the amendment filed 7/18/2011. Accordingly the specification has been amended.

Response to Arguments

Applicant's arguments filed 7/18/2011 have been fully considered but they are not persuasive. In response to applicant's argument that Bainbridge is non-analogous art is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bainbridge is reasonably in the field of applicant's endeavor and pertinent to the particular problem with which applicant was concerned, namely the field and problem of providing a cushioning layer for dampening impact, particularly cushioning by a closed cell foam layer.

Additionally it is noted that Bainbridge discloses that the foamed padding may be useful in any of various applications where foam padding is typically employed (Col. 9, lines 60-67), one of those applications being a flooring underlayment, thus demonstrating that it is indeed analogous; while Bainbridge does provide a listing of suitable uses, such listing is not presented as an exhaustive list, but merely a suggestive list of applications.

It is well known and notoriously common to employ foam padding in a flooring installation, and therefore a flooring installation would be considered as a suitable use

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for foam and particularly the foam as disclosed by Bainbridge, thereby being both reasonably pertinent and within applicant's field of endeavor. Further US PG Publication 20040069924 and WO02055299 disclose that it is known to employ padding typically used in sports equipment (paragraph 0007; background of the invention, respectively) as an underlayment in flooring.

Therefore in view of the disclosures of Bainbridge and 20040069924, WO02055299 one of ordinary skill in the art would have had good and sufficient reason and motivation to look to the disclosure of Bainbridge to solve the particular problem with which applicant was concerned, rendering indeed analogous. Lastly, Finley, 20040069924 and WO02055299 all disclose having a foam padding in flooring installations for providing properties such as: shock absorption, durability, energy dissipation, return upon contact, and porosity among others. Bainbridge and other foams used in sports equipment look to provide padding having similar characteristics and for that reason one of ordinary skill in the art would be motivated to look to Bainbridge for a foam padding.

Applicant's argument that the reasoning presented is conclusory and unsupported by any factual basis is not persuasive. As presented previously and again, the prior art supports that it is known to look to padding typically used in sport equipment and apply it to floor systems to provide a dampening effect to impact on the floor. Accordingly the reasoning is well supported by the prior art.

Applicant's argument that Bainbridge is concerned with a different problem is not persuasive, both Bainbridge and Applicant are looking solve common problems

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associated with impact forces, and looks to solves those problems with a foam cushioning/dampening layer. While it is true that Bainbridge achieves other benefits, such as lightweight, breathability and washability, those are merely functions of the foam, the foam is still used as a cushioning/dampening layer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12,19-32,34-38,42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley (5578363) in view of Bainbridge (6453477).

Regarding claims 1 and 19-20, 31-32, 45: Finley discloses a multi-layered flooring composite for use over a subfloor layer, said composite including a substantially horizontal top floor layer of substantially hard material (7), a subfloor layer of substantially hard material (6) and at least one acoustic layer (1) positioned between said top floor layer and said subfloor layer (where said layer includes a foam layer, abstract). Finley does not expressly disclose the characteristics of the foam layer.

Bainbridge discloses a closed cell foamed material of Polypropylene, having a plurality of discrete beads of substantially elastic, resilient material, wherein portions of adjacent beads abut one another and other portions of adjacent beads are spaced from each other to create spaces therebetween that permit the flow of liquid through the

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acoustic layer, and wherein substantially all of said adjacent beads are integrally joined together at the abutting portions thereof (Bainbridge - Col. 5).

It would have been obvious, and well within the general knowledge and common sense of one of ordinary skill at the time the invention was made to substitute one known padding for another, and modify the foam of Finley to be the foam material as disclosed by Bainbridge to provide a flooring surface that is resilient and durable for such activities as sports. (Reference US PG Publication 20040069924 and WO02055299 which teach using foams from sports padding in a flooring underlayment to make them suitable for cushioning and absorbing impacts due to sports while maintaining playability). Additionally it is noted that Bainbridge discloses In Col. 9, lines 60-67 using the padding material for use in other areas where padding is used (such as flooring).

Regarding claims 2-12, 22-23, and 35-38: The limitations of claims relating to the shape and location (including spaces) of the beads are merely limitations inherent to any of the various designs and constructions of a closed cell foam, as already known in the art and as disclosed by Bainbridge Cols. 2-5, 9.

Regarding claim 21: Finely in view of Bainbridge disclose the flooring composite as above, but do not expressly disclose the density of the acoustic layer, but do disclose various embodiments of fill percentages (equating to a density of the acoustic layer). It would have been obvious to one of ordinary skill in the art at the time the invention was made modify the density of the acoustic layer to be between 2-10 pounds per cubic foot as such a modification fails to provide an advantage, or solve a stated problem.

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Furthermore one of ordinary skill in the art would be motivated to pursue known options (such as various densities) to achieve a desired result (such as a certain amount of acoustic absorption) for the intended purpose of the invention.

Regarding claims 24-26: Finley in view of Bainbridge disclose the flooring composite as above where the projected diameters are greater than 1/8 inch, the same, or are about 1/4 inch (Bainbridge - Col. 5, lines 1-15), but do not expressly that the thickness is 1/8 inch. However, applicant has not disclosed that the claimed thickness provides an advantage, solves a problem, or is for a particular purpose. Therefore it appears to be a mere matter of design choice to one of ordinary skill in the art to use a closed foam having the claimed thickness as one would expect applicant's invention and that of Finley in view of Bainbridge to perform the same function of sound attenuation equally well considering the properties of a closed foam. Therefore absent any criticality the claimed limitations are anticipated by the prior art.

Regarding claims 27-29, 42-44: Finley in view of Bainbridge disclose the claimed flooring composite as above, but do not expressly disclose the claimed percentages of beads and air spaces. However applicant has not disclosed that the claimed percentages provide an advantage or are for a particular purpose; furthermore the percentages appear to be obvious design choices for closed cell foams and one of ordinary skill in the art would be motivated to use any closed cell foam containing the various percentages as such a foam would provide the function of sound attenuation equally well considering the properties of a closed cell foam and specifically that as disclosed by Bainbridge Cols. 2-5,9.

Regarding claims 30, 34: The flooring composite of claim 1, wherein said acoustic layer further includes a plurality of inelastic beads mixed with said elastic beads with portion of some of the elastic beads abutting portions of adjacent inelastic beads and being integrally joined thereto (Bainbridge - Col. 9, lines 45-50).

Claims 13-16,39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley (5578363) in view of Bainbridge (6453477) and further in view of Fiechtl (6189279).

Regarding claims 13-16, 39-40: Finley in view of Bainbridge discloses the flooring composite as above, but do not disclose a moisture-proof film. Fiechtl discloses a floor system having a foam sound insulating layer and further including a moisture-proof film layer (18), where the layer is attached to at least some of the beads as it is attached to the foam comprised of the those beads. The claimed limitations regarding the location of the film layer being between the acoustic layer and the subfloor or above the acoustic layer appear to be mere a mere design choice as applicant has not disclosed that either position provides an advantage, solves a stated problem or is used for a particular purpose, but rather discloses either position is an acceptable position. Therefore absent a showing of criticality, the limitations are anticipated by the prior art as disclosed above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA LAUX whose telephone number is (571)272-8228. The examiner can normally be reached on Monday thru Thursday, 9:00am to 5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jessica Laux/
Primary Examiner, Art Unit 3635